

## WHAT IS CLAIMED IS:

1. A light source assembly comprising:
  - a dielectric body having an exterior surface defining first and second ends thereof;
  - a light source mounted proximate the first end of said dielectric body and having first and second electrical leads extending from an end thereof proximate said dielectric body, said first electrical lead extending into said dielectric body for providing an electrical lead at the second end thereof distal said light source, and said second electrical lead being disposed proximate the exterior surface of said dielectric body for providing an electrical lead at the exterior surface of said dielectric body; and
  - a resilient member bearing against said dielectric body and the second electrical lead for providing an electrical contact of the second electrical lead.
2. The light source assembly of claim 1 wherein said resilient member is either between said dielectric body and the second lead for urging the second lead away from said dielectric body, or wherein the second electrical lead is between the resilient member and said dielectric body for urging the resilient member away from said dielectric body.
3. The light source assembly of claim 1 wherein said resilient member is either electrically insulating or electrically conductive.
4. The light source assembly of claim 1 wherein said resilient member is electrically conductive and extends beyond the second electrical lead of said light source for providing an electrical contact at the exterior surface of said dielectric body.

5. The light source assembly of claim 1 wherein said resilient member includes either an electrically-conductive O-ring around said dielectric body and in part between the second electrical lead and said dielectric body, or an electrically-conductive ring, sleeve, cup or helix disposed around at least part of said dielectric body and over the second electrical lead.
6. The light source assembly of claim 1 wherein said dielectric body has a slot on the exterior surface thereof, and wherein at least part of the second electrical lead is disposed in the slot.
7. The light source assembly of claim 1 further comprising a current limiting device disposed in said dielectric body, a first electrical lead of said current limiting device being connected to the first electrical lead of said light source and a second electrical lead of said current limiting device extending through said dielectric body for providing the electrical lead at a second end thereof distal said light source.
8. The light source assembly of claim 1 in combination with a metal member having a bore, wherein said light source assembly is disposed in the bore of said metal member with the second electrical lead and/or said resilient member being in electrical contact with the bore of said metal member.
9. A light source assembly comprising:
  - a dielectric body having an exterior surface defining first and second ends thereof;
  - a light source mounted proximate the first end of said dielectric body and having first and second electrical leads extending from an end thereof proximate said dielectric body, said first electrical lead extending into said dielectric body for providing an electrical lead at the second end thereof distal said light source, and said second electrical lead being disposed proximate the

exterior surface of said dielectric body for providing an electrical lead at the exterior surface of said dielectric body; and

an electrically-conductive resilient member bearing against said dielectric body and the second electrical lead, wherein said electrically-conductive resilient member is between said dielectric body and the second lead or wherein the second electrical lead is between the electrically-conductive resilient member and said dielectric body, for providing an electrical contact for the second electrical lead.

10. The light source assembly of claim 9 wherein said electrically-conductive resilient member includes either an electrically-conductive O-ring around said dielectric body and in part between the second electrical lead and said dielectric body or an electrically-conductive ring, sleeve, cup or helix disposed around at least part of said dielectric body and over the second electrical lead.
11. The light source assembly of claim 9 wherein said dielectric body has a slot on the exterior surface thereof, and wherein at least part of the second electrical lead is disposed in the slot.
12. The light source assembly of claim 9 further comprising a current limiting device disposed in said dielectric body, a first electrical lead of said current limiting device being connected to the first electrical lead of said light source and a second electrical lead of said current limiting device extending through said dielectric body for providing the electrical lead at a second end thereof distal said light source.
13. The light source assembly of claim 9 in combination with a metal member having a bore, wherein said light source assembly is disposed in the bore of said metal member with the second electrical lead and/or said electrically-conductive resilient member being in electrical contact with the bore of said metal member.

14. A light source assembly comprising:
  - a metal member having a bore; and a hole at an end thereof;
  - a dielectric body in the bore and having an exterior surface defining first and second ends thereof;
  - a light source mounted proximate the first end of said dielectric body in the bore and having first and second electrical leads extending from an end thereof proximate said dielectric body, said first electrical lead extending into said dielectric body for providing an electrical lead at the second end thereof distal said light source, and said second electrical lead being disposed proximate the exterior surface of said dielectric body for providing an electrical lead at the exterior surface of said dielectric body; and
  - a resilient member bearing against said dielectric body and the second electrical lead for providing an electrical connection between the second electrical lead and the bore of said metal member.
15. The light source assembly of claim 14 wherein said resilient member is either between said dielectric body and the second lead for urging the second lead against the bore of said metal member, or wherein the second electrical lead is between the resilient member and said dielectric body for urging the resilient member against the bore of said metal member.
16. The light source assembly of claim 14 wherein said resilient member is either electrically insulating or electrically conductive.
17. The light source assembly of claim 14 wherein said resilient member is electrically conductive and extends beyond the second electrical lead of said light source for providing an electrical contact at the exterior surface of said dielectric body.

18. The light source assembly of claim 14 wherein said resilient member includes either an electrically-conductive O-ring around said dielectric body and in part between the second electrical lead and said dielectric body, or an electrically-conductive ring, sleeve, cup or helix disposed around at least part of said dielectric body and over the second electrical lead.
19. The light source assembly of claim 14 wherein said dielectric body has a slot on the exterior surface thereof, and wherein the second electrical lead is disposed in the slot.
20. The light source assembly of claim 14 further comprising a current limiting device disposed in said dielectric body, a first electrical lead of said current limiting device being connected to the first electrical lead of said light source and a second electrical lead of said current limiting device extending through said dielectric body for providing the electrical lead at a second end thereof distal said light source.
21. The light source assembly of claim 14 wherein the light source extends into and/or through the hole at the end of the metal member.
22. A light source assembly comprising:
  - a metal member having a bore; and a hole at an end thereof;
  - a dielectric body in the bore and having an exterior surface defining first and second ends thereof;
  - a light source mounted proximate the first end of said dielectric body and having first and second electrical leads extending from an end thereof proximate said dielectric body, said first electrical lead extending into said dielectric body for providing an electrical lead at the second end thereof distal said light source, and said second electrical lead being disposed proximate the exterior surface of said dielectric body for providing an electrical lead at the exterior surface of said dielectric body; and

an electrically-conductive resilient member bearing against said dielectric body and the second electrical lead, wherein said electrically-conductive resilient member is between said dielectric body and the second lead or wherein the second electrical lead is between the electrically-conductive resilient member and said dielectric body, for providing an electrical connection between the second electrical lead and the bore of said metal member.

23. The light source assembly of claim 22 wherein said electrically-conductive resilient member includes either:

an electrically-conductive O-ring around said dielectric body and in part between the second electrical lead and said dielectric body, wherein the second electrical lead is in electrical contact with the bore of said metal member; or

an electrically-conductive ring, sleeve, cup or helix disposed around at least part of said dielectric body and over the second electrical lead, wherein the electrically-conductive ring, sleeve, cup or helix is in electrical contact with the bore of said metal member.

24. The light source assembly of claim 22 wherein said dielectric body has a slot on the exterior surface thereof, and wherein at least part of the second electrical lead is disposed in the slot.

25. The light source assembly of claim 22 further comprising a current limiting device disposed in said dielectric body, a first electrical lead of said current limiting device being connected to the first electrical lead of said light source and a second electrical lead of said current limiting device extending through said dielectric body for providing the electrical lead at a second end thereof distal said light source.

26. The light source assembly of claim 22 wherein the light source extends into and/or through the hole at the end of the metal member.
27. A light source assembly comprising:  
a dielectric body having an exterior surface defining first and second ends thereof;  
a light source mounted proximate the first end of said dielectric body and having first and second electrical leads extending from an end thereof proximate said dielectric body, said first electrical lead extending into said dielectric body for providing an electrical lead at the second end thereof distal said light source and said second electrical lead being disposed proximate the exterior surface of said dielectric body for providing an electrical lead at the exterior surface of said dielectric body; and  
an electrically-conductive annular member bearing on said dielectric body and the second electrical lead for providing an electrical contact at the exterior surface of said dielectric body.
28. The light source assembly of claim 27 wherein said electrically-conductive annular member includes an electrically-conductive ring, sleeve, cup or helix around the exterior surface of said dielectric body.
29. The light source assembly of claim 27 wherein said electrically-conductive annular member includes brass, copper, aluminum, a soft metal, and/or a material filled with electrically-conductive particles of copper, silver, carbon, brass, gold, nickel, graphite, silver-glass, silver-copper and/or silver-nickel.
30. The light source assembly of claim 27 in combination with a metal member having a bore, wherein said light source assembly is disposed in the bore of said metal member with said electrically-conductive annular member in electrical contact with the bore of said metal member.

31. A light source assembly comprising:
- a dielectric body having a longitudinal slot on a periphery thereof;
  - a light source mounted proximate an end of said dielectric body and having first and second electrical leads extending toward said dielectric body, said first electrical lead being disposed in said dielectric body for providing an electrical lead at an end thereof distal said light source and said second electrical lead being disposed in the longitudinal slot thereof for providing an electrical lead at the periphery of said dielectric body; and
  - an electrically-conductive annular member bearing on said dielectric body and the second electrical lead for providing an electrical contact at the exterior surface of said dielectric body.
32. The light source assembly of claim 31 wherein said electrically-conductive annular member includes an electrically-conductive ring, sleeve, cup or helix around the exterior surface of said dielectric body and having an interior surface in electrical contact with the second electrical lead.
33. The light source assembly of claim 31 wherein said electrically-conductive annular member includes brass, copper, aluminum, a soft metal, and/or a material filled with electrically-conductive particles of copper, silver, carbon, brass, gold, nickel, graphite, silver-glass, silver-copper and/or silver-nickel.
34. The light source assembly of claim 31 in combination with a metal member having a bore, wherein said light source assembly is disposed in the bore of said metal member with said electrically-conductive annular member in electrical contact with the bore of said metal member.



35. A light source assembly comprising:
- a dielectric body having an exterior surface defining first and second ends thereof;
  - a light source mounted proximate the first end of said dielectric body and having first and second electrical leads extending from an end thereof proximate said dielectric body, said first electrical lead extending into said dielectric body for providing an electrical lead at the second end thereof distal said light source and said second electrical lead being disposed proximate the exterior surface of said dielectric body for providing an electrical lead at the exterior surface of said dielectric body; and
  - a resilient member disposed for urging the second electrical lead away from said dielectric body.
36. The light source assembly of claim 34 wherein said resilient member is either electrically insulating or electrically conductive.
37. The light source assembly of claim 34:
- wherein said resilient member is electrically conductive and extends beyond the second electrical lead of said light source for providing an electrical contact at the exterior surface of said dielectric body; or
  - wherein said resilient member is an O-ring around said dielectric body.
38. The light source assembly of claim 34 in combination with a metal member having a bore in which said light source is disposed, wherein said resilient member urges the second electrical lead of said light source to electrically contact the bore of said metal member.
39. The light source assembly of claim 38 wherein said resilient member is electrically conductive for providing an electrical connection between the second electrical lead and the bore of said metal member.

40. A light source assembly comprising:
- a dielectric body having a longitudinal slot on a periphery thereof;
  - a light source mounted proximate an end of said dielectric body and having first and second electrical leads extending toward said dielectric body, said first electrical lead being disposed in said dielectric body for providing an electrical lead at an end thereof distal said light source and said second electrical lead being disposed in the longitudinal slot thereof for providing an electrical lead at the periphery of said dielectric body; and
  - a resilient member disposed between said dielectric body and the second electrical lead for urging the second electrical lead away from said dielectric body.
41. The light source assembly of claim 40 wherein said resilient member is either electrically insulating or electrically conductive.
42. The light source assembly of claim 40:
- wherein said dielectric body has a recess, wherein at least a part of said resilient member is disposed in the recess of said dielectric body; or
  - wherein said dielectric body has a circumferential groove intersecting the longitudinal slot, wherein said resilient member is an O-ring disposed in the circumferential groove of said dielectric body.
43. The light source assembly of claim 40 wherein at least a part of said resilient member is disposed in the longitudinal slot of said dielectric body.
44. The light source assembly of claim 40 wherein said resilient member is an O-ring.

45. The light source assembly of claim 40 in combination with a metal member having a bore in which said light source is disposed, wherein said resilient member urges the second electrical lead of said light source to electrically contact the bore of said metal member.
46. The light source assembly of claim 45 wherein said resilient member is electrically conductive for providing an electrical connection between the second electrical lead and the bore of said metal member.
47. A light source assembly comprising:
- a cylindrical body of a dielectric material having a longitudinal slot on an exterior surface thereof, the exterior surface defining a periphery;
  - a solid state light source mounted coaxially proximate an end of said cylindrical body and having first and second electrical leads extending from an end thereof proximate said cylindrical body, said first electrical lead extending into said cylindrical body and said second electrical lead being disposed in the longitudinal slot thereof;
  - an electrically-conductive annular member disposed around the exterior surface of said cylindrical body for providing an electrical contact for the second lead of said solid state light source at the periphery of said cylindrical body; and
  - means exhibiting resistance for extending the first electrical lead of said solid state light source through said cylindrical body at an end thereof distal said solid state light source.

48. The light source assembly of claim 47 wherein said means exhibiting resistance an electrical device having a first lead connecting to the first electrical lead of said solid state light source and having a second lead extending through said cylindrical body at the end thereof distal said solid state light source.
49. The light source assembly of claim 48 wherein said electrical device is a resistor, a carbon resistor, a current limiter and/or a field effect transistor current limiter.
50. The light source assembly of claim 47 in combination with a metal housing having a cylindrical bore in which said light source assembly is disposed, wherein at least said electrically-conductive annular member of said light source assembly contacts the bore of said metal housing for making electrical connection thereto.
51. The light source assembly of claim 50 wherein said cylindrical body with the second electrical lead disposed in the longitudinal slot thereof and said electrically-conductive annular member thereon is a press fit in the cylindrical bore of said metal housing.
52. The light source assembly of claim 50 wherein said metal housing has a hole at an end thereof extending axially from the cylindrical bore therein, and wherein said solid state light source extends into and/or through the hole in the end of said metal housing.
53. The light source assembly of claim 50 wherein the second electrical lead of said solid state light source contacts the bore of said metal housing for making electrical connection thereto.

54. The light source assembly of claim 47 wherein said cylindrical body is a rigid dielectric material, a moldable plastic, a ceramic, and/or a glass-filled PBT plastic.
55. The light source assembly of claim 47:  
wherein said solid state light source is a light emitting diode; and/or  
wherein said electrically-conductive annular member includes an electrically-conductive O-ring surrounding said cylindrical body and in electrical contact with the second electrical lead; and/or  
wherein said electrically-conductive annular member includes an electrically-conductive metal ring, sleeve, cup or helix around the exterior surface of said dielectric body and having an interior surface in electrical contact with the second electrical lead.
56. The light source assembly of claim 47 further comprising an O-ring surrounding said solid state light source.
57. A light source assembly comprising:  
a cylindrical body of a dielectric material having a longitudinal slot on an exterior surface thereof, the exterior surface defining a periphery;  
an LED solid state light source mounted coaxially proximate an end of said cylindrical body and having first and second electrical leads extending from an end thereof proximate said cylindrical body, said first electrical lead extending into said cylindrical body and said second electrical lead being disposed in the longitudinal slot thereof;  
an electrically-conductive annular metal member disposed around the exterior surface of said cylindrical body for making electrical connection to the second lead of said LED solid state light source and providing an electrical contact at the periphery of said cylindrical body; and  
means exhibiting resistance for extending the first electrical lead of

said LED solid state light source through said cylindrical body at an end thereof distal said solid state light source.

58. The light source assembly of claim 57 wherein said means exhibiting resistance an electrical device having a first lead connecting to the first electrical lead of said LED solid state light source and having a second lead extending through said cylindrical body at the end thereof distal said solid state light source.
59. The light source assembly of claim 58 wherein said electrical device is a resistor, a carbon resistor, a current limiter and/or a field effect transistor current limiter.
60. The light source assembly of claim 57 in combination with a metal housing having a cylindrical bore in which said light source assembly is disposed, wherein said electrically-conductive annular metal member of said light source assembly contacts the bore of said metal housing for making electrical connection thereto.
61. The light source assembly of claim 60 wherein said cylindrical body with the second electrical lead disposed in the longitudinal slot thereof and said electrically-conductive annular metal member thereon is a press fit in the cylindrical bore of said metal housing.
62. The light source assembly of claim 60 wherein said metal housing has a hole at an end thereof extending axially from the cylindrical bore therein, and wherein said solid state light source extends into and/or through the hole in the end of said metal housing.

63. The light source assembly of claim 57 wherein said cylindrical body is a rigid dielectric material, a moldable plastic, a ceramic, and/or a glass-filled PBT plastic.
64. A light source assembly for a flashlight comprising:  
a cylindrical body of a dielectric material having a longitudinal slot and a recess on an exterior surface thereof, the exterior surface defining a periphery;  
an LED solid state light source mounted coaxially proximate a first end of said cylindrical body and having first and second electrical leads extending from an end thereof proximate said cylindrical body, said first electrical lead extending into said cylindrical body and said second electrical lead being disposed in the longitudinal slot thereof;  
a resilient member disposed in the recess on the exterior surface of said cylindrical body between the second electrical lead of said LED solid state light source and said cylindrical body for urging the second electrical lead away from said cylindrical body; and  
a current limiting device disposed in said cylindrical body and having first and second electrical leads, the first electrical lead of said current limiting device being connected to the first electrical lead of said LED solid state light source and the second electrical lead of said current limiting device extending through a second end of said cylindrical body distal said LED solid state light source.
65. The light source assembly of claim 64 wherein the recess of said cylindrical body is a circumferential groove on the exterior surface thereof, and wherein said resilient member is either an electrically insulating O-ring or an electrically conductive O-ring disposed in the circumferential groove.

66. The light source assembly of claim 64 wherein said resilient member is either electrically insulating or electrically conductive.
67. The light source assembly of claim 64 wherein said current limiting device is a resistor, a carbon resistor, a current limiter and/or a field effect transistor current limiter.
68. The light source assembly of claim 64 in combination with a metal housing having a bore in which said light source is disposed, wherein the resilient member urges the second electrical lead of said LED solid state light source to contact the bore of said metal housing for making electrical contact therewith.
69. The light source assembly of claim 68 wherein said resilient member is electrically conductive and electrically contacts the second electrical lead of said LED solid state light source and the bore of said metal housing.
70. The light source assembly of claim 68 wherein said cylindrical body with said second electrical lead disposed along the exterior surface thereof is a press fit in the bore of said metal housing.
71. The light source assembly of claim 64 wherein the second electrical lead of said current limiting device extending through the second end of said cylindrical body is bent for providing a contact to a battery.
72. The light source assembly of claim 64 wherein said cylindrical body is a rigid dielectric material, a moldable plastic, a ceramic, and/or a glass-filled PBT plastic.
73. The light source assembly of claim 64 further comprising an O-ring surrounding said LED solid state light source.